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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
09/918,952	07/31/2001	Philip Shi-Lung Yu	YOR9-2001-0363US1 (8728-5	2574

7590 08/27/2004

EXAMINER	
FLEURANTIN, JEAN B	

ART UNIT	PAPER NUMBER
2172	

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DATE MAILED: 08/27/2004

Please find below and/or attached an Office communication concerning this application or proceeding.

Advisory Action	Application No.	Applicant(s)	
	09/918,952	YU ET AL.	
	Examiner	Art Unit	
	JEAN B. FLEURANTIN	2172	

--The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

THE REPLY FILED 22 July 2004 FAILS TO PLACE THIS APPLICATION IN CONDITION FOR ALLOWANCE. Therefore, further action by the applicant is required to avoid abandonment of this application. A proper reply to a final rejection under 37 CFR 1.113 may only be either: (1) a timely filed amendment which places the application in condition for allowance; (2) a timely filed Notice of Appeal (with appeal fee); or (3) a timely filed Request for Continued Examination (RCE) in compliance with 37 CFR 1.114.

PERIOD FOR REPLY [check either a) or b)]

a) ☒ The period for reply expires *3* months from the mailing date of the final rejection.

b) ☐ The period for reply expires on: (1) the mailing date of this Advisory Action, or (2) the date set forth in the final rejection, whichever is later. In no event, however, will the statutory period for reply expire later than SIX MONTHS from the mailing date of the final rejection.
ONLY CHECK THIS BOX WHEN THE FIRST REPLY WAS FILED WITHIN TWO MONTHS OF THE FINAL REJECTION. See MPEP 706.07(f).

Extensions of time may be obtained under 37 CFR 1.136(a). The date on which the petition under 37 CFR 1.136(a) and the appropriate extension fee have been filed is the date for purposes of determining the period of extension and the corresponding amount of the fee. The appropriate extension fee under 37 CFR 1.17(a) is calculated from: (1) the expiration date of the shortened statutory period for reply originally set in the final Office action; or (2) as set forth in (b) above, if checked. Any reply received by the Office later than three months after the mailing date of the final rejection, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

1. ☐ A Notice of Appeal was filed on _____. Appellant's Brief must be filed within the period set forth in 37 CFR 1.192(a), or any extension thereof (37 CFR 1.191(d)), to avoid dismissal of the appeal.

2. ☐ The proposed amendment(s) will not be entered because:

(a) ☐ they raise new issues that would require further consideration and/or search (see NOTE below);

(b) ☐ they raise the issue of new matter (see Note below);

(c) ☐ they are not deemed to place the application in better form for appeal by materially reducing or simplifying the issues for appeal; and/or

(d) ☐ they present additional claims without canceling a corresponding number of finally rejected claims.

NOTE: _____.

3. ☐ Applicant's reply has overcome the following rejection(s): _____.

4. ☐ Newly proposed or amended claim(s) _____ would be allowable if submitted in a separate, timely filed amendment canceling the non-allowable claim(s).

5. ☒ The a)☐ affidavit, b)☐ exhibit, or c)☒ request for reconsideration has been considered but does NOT place the application in condition for allowance because: *See Continuation Sheet*.

6. ☐ The affidavit or exhibit will NOT be considered because it is not directed SOLELY to issues which were newly raised by the Examiner in the final rejection.

7. ☒ For purposes of Appeal, the proposed amendment(s) a)☐ will not be entered or b)☐ will be entered and an explanation of how the new or amended claims would be rejected is provided below or appended.

The status of the claim(s) is (or will be) as follows:

Claim(s) allowed: *26-34*.

Claim(s) objected to: *7,8,10-15 and 22*.

Claim(s) rejected: *1-6,9,16-21 and 23-25*.

Claim(s) withdrawn from consideration: _____.

8. ☐ The drawing correction filed on _____ is a)☐ approved or b)☐ disapproved by the Examiner.

9. ☐ Note the attached Information Disclosure Statement(s)(PTO-1449) Paper No(s). _____.

10. ☐ Other: _____

Continuation of 5. does NOT place the application in condition for allowance because: Applicants stated on pages 2 and 3, that "the split test" disclosed in Agrawal creates univariante decision trees, and not multivariante decision trees, as recited in claim 1. It is submitted that Agrawal discloses the claimed limitations as follow: Agrawal teaches a method for building a decision tree from an input dataset, the input data set comprising records and associated attributes, the attributes including a class label attribute for indicating whether a given record is a member of a target class or a non-target class, the input data set being biased in favor of the records of the non-target class (see col. 3, lines 25-29 of Agawal), the decision tree comprising a plurality of nodes that include a root node and leaf nodes (see col. 3, lines 40-41 of Avawal). In particular, Agrawal discloses the claimed features of "constructing the decision tree from the input data set, including the step of partitioning each of the plurality of nodes of the decision tree, beginning with the root node, based upon multivariate subspace splitting criteria" (see col. 3, lines 40-43 of Agawal, as a means for creating a decision tree is created by repeatedly splitting the records at each examined node starting with the root node, at any examined node a split test is determined to best separate the records at that node by record class and using the attribute lists, the node's records are split according to the best split test into partitions of records to form child nodes of the examined node); and "classifying and scoring the records, based upon the decision tree and the nearest neighbor set of nodes" (see col. 2, lines 44-46 of Agrawal, as a means for classifying the nodes into the high or low risk categories). Agawal does not explicitly disclose the steps of computing distance functions for each of the leaf nodes; and identifying, with respect to the distance functions, a nearest neighbor set of nodes for each of the leaf nodes based upon a respective closeness of the nearest neighbor set of nodes to a target record of the target class. However, Agrawal discloses the use of "a nearest neighbor set of nodes for each of the leaf nodes based upon a respective closeness of the nearest neighbor set of nodes to a target record of the target class" (see col. 6, lines 52-54 of Agrawal, as records at each new leaf node are checked at block twenty three to see if they are of the same class). Rammswamy, on the other hand, discloses an analogous system that teaches the claimed features "computing distance functions for each of the leaf nodes" as a means for using the square of the euclidean distance as the distnnce metric, (see Ramaswamy page 429, col. 2, lines 36-46), which is similar to the description provided by the applicant (specification on page 33, lines 10-20). Applicant should duly note, that Rammswamy uses the kth neighbor of the nth. outlier to define the neighborhood distance d (see Rammswamy page 428, col. 1, lines 50-52). It would have been obvious to a person of ordinary skill in the art at the time of the invention was made to combine Ramaswnmy's distance function (page 429) with Agrawal's nearest neighbor set of node (col. 6, lines 52-54), in other to achieve computing distance functions for each of the leaf nodes; and identifying, with respect to the distance functions, a nearest neighbor set of nodes for each of the leaf nodes based upon a respective closeness of the nearest neighbor set of nodes to a target record of the target class. One having ordinary skill in the art at the time the invention was made would have been motivated to utilize such combination as such would have allowed Agrawal's system the enhanced capability of improving the accuracy and the effciency of the method for building space splitting decision tree, and provide performance of the partition based algorithm relatively unchanged, (see Rnmaswamy page 437, col. 1, lines 17-18), therefore providing a quicker computation time of identifying small patterns for a given data analysis. Thus, the arguments are not persuasive.

SHAHID ALAM
PRIMARY EXAMINER